

CLAIMS

1. A magnetic bearing controller for supplying a controlled current to an electromagnet for levitating a rotating
5 body at a predetermined position, said controller comprising:

an electromagnet for generating magnetic force by said controlled current;

a power amplifier unit for supplying said controlled current to said electromagnet, said controlled current being
10 pulse width modulated;

a signal amplifier unit for amplifying signal before inputting to said power amplifier;

a status detector unit for detecting a status of said rotating body, said rotating body being levitated by magnetic
15 force which is generated by said electromagnet according to said controlled current; and

an eliminator unit for eliminating ^{harmonic} [frequency] components having a
[of] frequency [area] which ~~is~~ used by said status detector unit,
said eliminator unit being inserted between said signal
20 amplifier unit and said power amplifier unit.

~~exists in the~~ frequency ~~area~~ area

2. A magnetic bearing controller according to claim 1, wherein said power amplifier unit is provided with a pulse width modulation circuit which comprises of comparator for comparing
25 an input signal with chopper wave signal, and said eliminator is connected at the front end of said comparator.

3. A magnetic bearing controller according to claim 1, wherein said status detector is an inductance type displacement
30 sensor.

4. A magnetic bearing controller according to claim 1, wherein said eliminator is a band eliminator filter.